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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,997

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Christoph Krohnke

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CLARIANT CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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EXAMINER

SANDERS, KRIELLION ANTIONETTE

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

04/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/550,997	Applicant(s) KROHNKE ET AL.	
	Examiner Kriellion A. Sanders	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/07</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 9-11 and 13 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wolfe, US Patent No. 5,266,616.

Wolfe discloses a resin formulation comprising an ethylene polymer, a UV light stabilizer, an antioxidant, and an isoindolinone organic pigment.

Claim 4 of the patent is directed to a yellow organically pigmented polyolefin resin consisting essentially of:

(a) an ethylene/hexene copolymer of about 0.939 g/cc density and melt index of about 0.13 using Condition 190/2.16,

(b) about 0.175 weight percent 1,3,5-triazine-2,4,6-triamine,N,N'''-[1,2-ethanediylbis[[[4,6-bis[butyl(1,2,2,6,6-pentamethyl-4-piperidiny)amino]-1,3,5-triazine-2-yl]imino]-3,1propanediyl]]-bis[N',N''-dibutyl-N',N''-bis(1,2,2,6,6-pentamethyl-4-piperidiny)-,

(c) about 0.15 weight percent tris(2,4-di-tert-butylphenyl)-phosphite,

(d) about 0.10 weight percent tetrakis(methylene(3,5-di-tert-butyl-4-hydroxyhydrocinnamate))methane, and

(e) a tetrachloroisoindolinone organic pigment.

Patentee states that, “the amount of antioxidant is dependent upon the severity of the environment for a given application. An antioxidant concentration effective to prevent autoxidation under the envisioned usage conditions and life span of the product should be added to the resin. Generally, a net antioxidant (primary and secondary) and UV stabilizer (generally a hindered amine) concentration in the resin of about 0.325 to 0.625 wt % is preferred. UV stabilizers also function as antioxidants because of their free radical trapping effectiveness. Preferably, the combined concentration of primary (generally phenolic) and secondary (generally phosphitic) antioxidants should be about 0.05 to 0.50 wt %. Because of a synergistic relationship between phenolic antioxidants and phosphites, a weight ratio of about 1:1 to 1:4 phenolic antioxidant to phosphite is preferred”.

Patentee further states that organic pigments provide an alternative to the use of heavy metal-bearing inorganic pigments. However, prior to the patented invention, the processing and formulation of an organically pigmented polyolefin resin presented numerous problems. Organic pigments are generally more expensive, less thermally stable, and present unique processing problems. These processing problems encompass

- ◆ the thermal stability of the pigment at melt temperatures,
- ◆ the compatibility of the base resin with various additives and residues which may be present in the melt prior to extrusion,
- ◆ the rheological properties of the melt and any associated effects on the extrusion or molding process,
- ◆ the degree of warping or shrinkage upon processing,
- ◆ the color fastness and the weathering characteristics of the product, and

- ◆ the mechanical and physical properties of the finished product.

All of these problems are more acute when high molecular weight resins are used. Unlike a dye which dissolves in the resin, pigments are small, intensely colored, discrete particles which are dispersed throughout the solid matrix. Therefore, the physical properties of the finished product are dependent on the surface interactions between the pigment and the solidified resin and the associated effects of the various additives. See col. 2, line 8 through col. 7, line 49.

It is clear that patentee contemplated the use of the claimed HALS, UV absorbers and antioxidant additives in the polyolefin compositions to lessen the effect of warpage. No patentable difference is seen between present and patented inventions.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 103

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable Wolfe, US Patent No. 5,266,616. as applied to claims 1-7, 9-11 and 13 above, and further in view of Kletecka US Patent No. 5,049,600.

Kletecka discloses that a combination of two primary stabilizers, provides an unexpectedly effective stabilization system for polyolefins (PO) pigmented with a phthalocyanine pigment. One primary stabilizer is an oxo-piperaziny triazine ("PIP-T") in which each substitutable position on each triazine ring is substituted with a polysubstituted

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piperazinone; and the other is a 2:1 complex of an alkylated phenol phosphonate with a Group VIII or Group IIA metal, e.g. a metal bis[0-alkyl(3,5-di-t-butyl-4-hydroxybenzyl)] phosphonate ("3,5-DHBP" for brevity).

Patentee includes a metal stearate such as calcium or zinc stearate in an amount insufficient to deleteriously affect the color of the fibers, preferably in the range from about 100 ppm to about 1500 ppm. The metal stearate is added to the polyolefins solely for the purpose of facilitating processing of the PO melt, particularly for melt extrusion of the PO.

See col. 6, line 30 through col. 7, line 17; col. 8, line 15 through col. 12, line 31. and col. 12, line 65 through col. 13, line 2.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the metal stearate processing stabilizers of Kletecka into the polyolefin compositions of Wolfe to achieve their usual processing stabilizing properties. Nothing of an unobvious nature is seen in such a variation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 8:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kriellion A. Sanders/

Primary Examiner, Art Unit 1796

Kriellion A. Sanders
Primary Examiner
Art Unit 1796

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